## **ABSTRACT**

A method and apparatus for maintaining coherence information in multi-cache systems is described herein. In one embodiment, the apparatus includes an Ingrained Sharing Directory Cache (ISDC) to store state information about recent copies of local memory blocks. The ISDC is adapted to receive Ingrained Sharing Directory Storage (ISDS) requests and create ISDC entries from information presented by the ISDS. The apparatus also includes an ISDC pending queue to store pending ISDC operations.